

SLIDER WITH RECESSED PRESSURIZATION SURFACES

ABSTRACT OF THE DISCLOSURE

One embodiment of the present invention pertains to a slider that includes
5 an aerodynamic surface which includes a first bearing surface, a cavity floor, and
a first recessed pressurization surface. The first bearing surface is disposed on the
aerodynamic surface, defining a bearing height. The cavity floor is disposed on
the aerodynamic surface at a cavity depth below the bearing height. The first
recessed pressurization surface is adapted to provide above-ambient fluid
10 pressure when the slider is in nominal flight, which is greater than fluid pressure
provided elsewhere on a trailing half of the aerodynamic surface at a substantial
displacement from a longitudinal centerline of the aerodynamic surface. The first
recessed pressurization surface is disposed on the aerodynamic surface at a
recessed depth which is between the bearing height and the cavity depth.